



Carnegie Foundation
for the Advancement of Teaching

Mathematics Pathways for Student Success in Community Colleges

In cooperation with the Charles A. Dana Center

<http://tinyurl.com/rpmstatway>

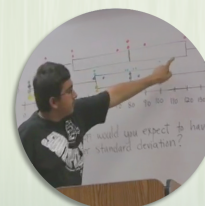
Presented by

James Gray

- Mathematics Instructor, Tacoma Community College

Lawrence Morales

- Improvement Specialist, Carnegie Foundation
- Mathematics Instructor, Seattle Central Community College



The Problem: Developmental Math

60%

of community
college students

60% of community college students taking the placement exam need **at least 1 developmental course**

3-5

additional courses

The remedial college math path can be **3-5 courses**

>

More students drop out **between courses** than from an actual class

1

remedial math
pathway

Only **one developmental math pathway**, regardless of major



Carnegie Foundation
for the Advancement of Teaching

Partners: Funding



Carnegie Foundation
for the Advancement of Teaching



THE KRESGE FOUNDATION



Lumina[™]
FOUNDATION

BILL & MELINDA
GATES foundation

www.carnegiefoundation.org
pathways@carnegiefoundation.org

3

Solution: New Mathematics Pathways

Two 1-year courses for pre-algebra students



“To-and-through” college-level **statistics**



“To-and-through” college-level **quantitative reasoning**



Carnegie Foundation
for the Advancement of Teaching

4

Solution: More than a curriculum

- Combines **research** and **practice**
- Applies **cognitive and learning theory**
- Supports **pedagogy** and **professional development**
- **Removes barriers** of language and literacy
- Uses **improvement science/research** through community network



5

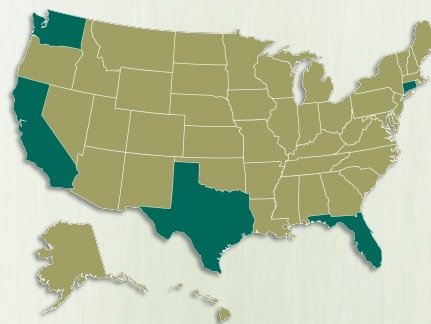
STATWALYSM

Seeding the Network

19 Community colleges

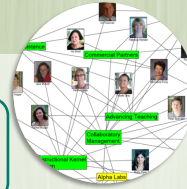
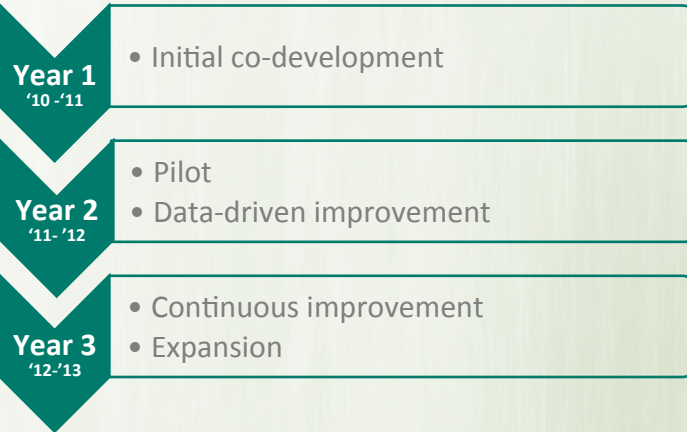
3 California State universities

5 States (CA, WA, TX, FL, CT)



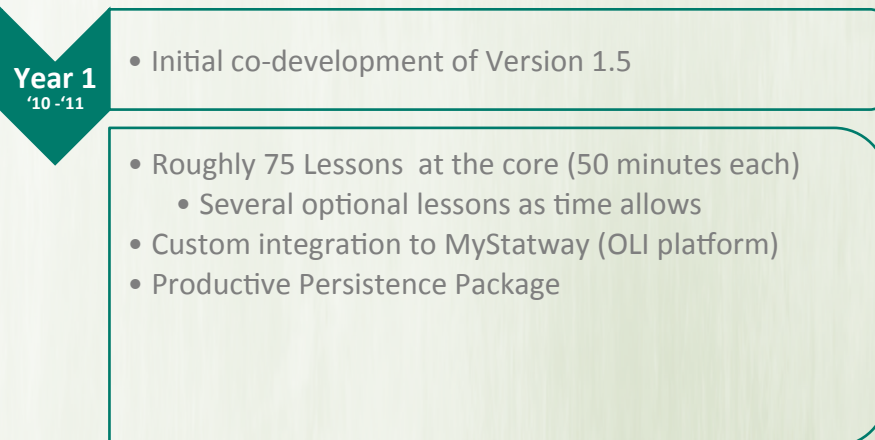
6

Timeline: Where we are going



7

Timeline: Year I (Nationwide)



8

Timeline: Year I (Washington)

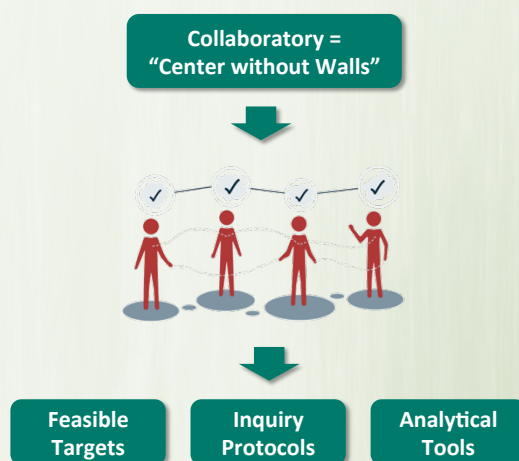
Year 1
'10-'11

- Initial co-development
- Teams were formed at TCC and SCCC
- Teams attended Summer and Winter Institutes
- Teams piloted lessons on their campuses
- [Dev Ed & MATH136](#) courses created at TCC and SCCC



9

Collaboratory: A Center Without Walls



10

Timeline: Year 2 (Nationwide)

Year 2
'11-'12

- Launch & Improvement
- Statway launched at 5 colleges August 22
- At least 5 more August 29
- All 22 campuses by the end of September
- [Lesson Study](#) (Revised Japanese Model)
- Continuous Improvement



11

Timeline: Year 2 (Washington)

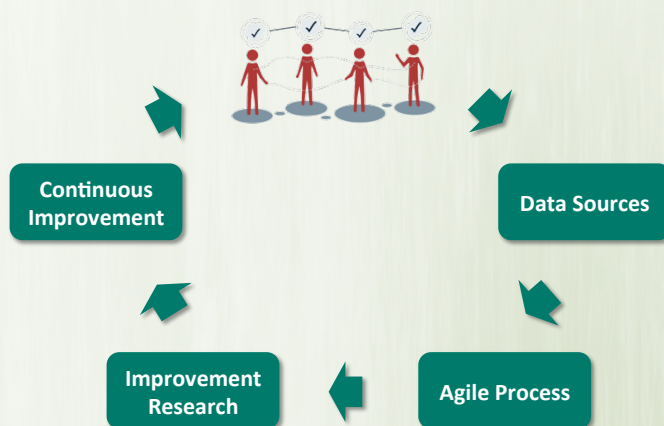
Year 2
'11-'12

- Launch & Improvement
- Summer Institute to prepare for Fall
- 4-year WA Universities approval
- Courses in place for registration
- Launch local versions
- Lesson Study (Revised Japanese model)



12

NIC: Network Improvement Community



Timeline: Year 3

Year 3
'12-'13

- Continuous Improvement & Expansion
- Launch Version 2.0
- Refine the Agile improvement process
- Engage in large improvement research projects
- Expansions
 - Within districts
 - Within states
 - Across states

Conclusion: Questions



Carnegie Foundation
for the Advancement of Teaching

www.carnegiefoundation.org

pathways@carnegiefoundation.org

<http://tinyurl.com/rpmstatway>

James Gray, jgray@tacomacc.edu

Lawrence Morales, morales@carnegiefoundation.org

15